

## Abstract

The invention relates to a nucleic acid molecule, comprising a nucleic acid which codes for a polypeptide with chorismate mutase activity and derivatives thereof, whereby the derivatives have at least 10% of the chorismate mutase activity of the chorismate mutase, according to the identification number of the SEQ ID NO:2. The invention further relates to vectors containing nucleic acid molecules, to host cells comprising nucleic acid molecules and their use in methods for producing polypeptides with chorismate mutase activity. The invention also relates to the polypeptides with chorismate mutase activity and antibodies which specifically recognise the same. In addition, the invention relates to methods for producing auxotrophic yeast strains using the nucleic acid molecules and to the preparation of the yeast strains. The invention also relates to the use of yeast strains together with the inventive vectors in methods for the recombinant expression of heterologous genes which allow the transformants to be easily selected by functional complementation.